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EXAMINER
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MYHRE, JAMES W

ART UNIT	PAPER NUMBER
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2162

DATE MAILED: 04/05/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

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# Office Action Summary

Application No.  
09/045,518

Applicant(s)  
Van Luchene

Examiner  
James W. Myhre

Art Unit  
2162

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on Jan 24, 2002
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some\* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 19
- 18) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other: \_\_\_\_\_

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## **DETAILED ACTION**

### ***Response to Amendment***

1. The amendment filed on January 24, 2002 has been considered but is ineffective to overcome the Phillip Fiorini ("No Place for a Penny") and Eleftheriou (5,869,826) references. The amendment added new Claim 31. Upon entry of this amendment the currently pending claims are Claims 1-31.

### ***Claim Rejections - 35 USC § 101***

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-24 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

In response to the Applicant's arguments against the previous rejection of Claims 1-24 under 35 U.S.C. 101, the Examiner has once again reviewed the claims and consulted with the "101 Panel" in reference to the recent interpretations of statutory material. The panel again agreed with the Examiner's conclusion that although the rounded purchase price is tangible and may possibly be useful, the purchase price is not tied to anything concrete and no intended use for it is indicated in the claims. Thus, it does not meet the three criteria for statutory material and is

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deemed to be an abstract idea. Therefore, the Examiner has maintained the previous rejection, which is recited again below for the Applicant's convenience.

Claims 1- 24 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 1, 3, 5, and 7-15 recite a series of steps and are considered for the purpose of analysis under 35 U.S.C. 101 as reciting a series of steps. Claims 2, 4, 6, and 16-24 recite an apparatus (programmed computer) which performs the steps of the method claims above. There is no disclosure within the specification that the apparatus itself is a specific machine, but merely a general purpose computer that is programmed to perform the steps of the method claims. Therefore, Claims 2, 4, 6, and 16-24 are analyzed based on the series of steps being performed. Further, the claims do not recite and pre- or post-computer activity but merely perform a series of steps of receiving data and manipulating the data, and is directed to non-statutory subject matter. A process is statutory if it requires physical acts to be performed outside of the computer independent of and following the steps performed by a programmed computer, where those acts involve the manipulation of tangible physical objects and result in the object having a different physical attribute or structure (*Diamond v. Diehr*, 450 U.S. at 187,209 USPQ at 8). Further, the claims merely manipulate an abstract idea or perform a purely mathematical algorithm (adding and rounding) without limitation to any practical application. A process which merely manipulates an abstract idea or performs a purely mathematical algorithm is non-statutory despite the fact that it might have some inherent usefulness (*Sakar*, 558 F.2d at 1335,200 USPQ at 139).

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***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Phillip Fiorini ("No Place for a Penny") in view of Eleftheriou (5,869,826).

Claims 1-6: Fiorini discloses several businesses, such as Kroger and Winn-Dixie supermarkets (page 1) and Christie's Cafe (page 2) which have been rounding off purchase prices. In these examples, the rounding code is inferred to be to the closest nickel (a rounding multiplier of 5 cents), and the purchase price is then rounded to eliminate the requirement for pennies. Furthermore, as shown in the Examiner's Affidavit which accompanied paper number 11, the Examiner had first-hand experience with rounding the purchase price to eliminate receiving change in late 1950's and early 1960's at the local grocery store. As an example, if, when I purchased a soft drink (15 cents) and a chocolate bar (7 cents) for a total of 22 cents, I only had a quarter (25 cents), the grocer would offer one or more supplemental products (normally candy) in lieu of the 3 cents change due. This is not an isolated example. Many retail establishments offer the customer sticks of gum, etc. in order to round off the purchase price and to eliminate the need to handle small change. Additionally, it is common when purchasing large items, such as automobiles and houses, to round off the final purchase price to the nearest \$10, \$20, \$100, or

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even \$1,000. While Fiorini does not explicitly disclose that the rounding code is being selected from a plurality of rounding codes, Eleftheriou discloses a similar method for rounding purchase prices which also discloses that the rounding code could be a nickel, dime, quarter, one dollar, etc. (col 8, lines 24-38). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made that the merchant in Fiorini must choose the desired rounding code from the whole range of possible rounding codes which ranges from one cent to infinity. It would have also been obvious that the merchant would choose a rounding code that corresponded to the most commonly used denomination of currency, such as a nickel, dime, quarter, one dollar, five dollars, ten dollars, twenty dollars, or some multiple of each. One would have been motivated to choose different rounding codes for different items/purchases in order to provide a more logical rounded price as discussed in paragraph 11c in paper number 11.

Claims 7-24: Fiorini and Eleftheriou disclose rounding off purchase prices using rounding codes and multipliers as described in Claims 1-6 above, but do not explicitly disclose that the rounding code is also associated with a fixed price. Official Notice is taken that it is old and well known within the retail arts to set a fixed price for each product, supplemental or otherwise, and to associate the fixed price and rounding code (multiplier). In support of this Official Notice, the Examiner notes that Eleftheriou discloses that the salesperson enters the total dollar cost of the goods (col 7, lines 12-14); thus, inferring that a fixed price is associated with each of the goods. In further support, the Examiner notes that the Applicant states on page 3 of the specification that “the upsell price is not fixed like most conventional prices for items”, thus admitting that most

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goods have fixed prices. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made that when more than one product is selected by the customer to add the fixed prices together and then to select one rounding code to use to round the purchase price. One would have been motivated to do this in order to prevent unnecessary calculations by the system. For instance, if three items had fixed prices of \$14.50, \$7.50, and \$1.75 and rounding multipliers (codes) of \$10, \$5, and \$1, respectively, the total of the fixed prices would be \$23.75. If the \$10 rounding multiplier was applied, the adjusted price would be \$30.00. If the \$5 rounding multiplier was applied, the adjusted price would be \$25.00. Finally, if the \$1 rounding multiplier was applied, the adjusted price would be \$24.00. However, once the price had been rounded to \$30.00 by the \$10 rounding code, the other two rounding factors would not adjust the purchase price since \$30 is a factor of both \$5 and \$10. Thus, these calculations would be unnecessary.

Claims 25-27: Fiorini discloses several businesses, such as Kroger and Winn-Dixie supermarkets (page 1) and Christie's Cafe (page 2) which have been rounding off purchase prices. In these examples, the rounding code is inferred to be to the closest nickel (a rounding multiplier of 5 cents), and the purchase price is then rounded to eliminate the requirement for pennies, as discussed in reference to Claims 1-6 above. While Fiorini does not explicitly disclose providing an item not included the original purchase price in addition to the item(s) originally being purchased in exchange for the rounded purchase price, it is old and well known within the retail arts to do so, as per the Examiner's Affidavit. The feature of selecting a rounding multiplier

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based in the rounding code received has been discussed in conjunction with the Eleftheriou reference in Claims 7-24 above.

Claims 28-31: Fiorini discloses rounding off purchase prices using rounding codes and multipliers as described in Claims 1-6 above, but does not disclose using a bar code scanner to input information about the item. Eleftheriou discloses a similar method for rounding purchase prices which includes a bar code scanner for inputting information about the items (col 5, lines 61-64). Eleftheriou also discloses rounding the price based upon an integer selected from a plurality of integers in which at least one of the integers is 1 (col 8, lines 24-38). Eleftheriou discloses that the price is rounded up or down to the nearest whole dollar (i.e. an integer of 100) or to whole quarters, dimes, nickels, pennies, etc. (i.e. an integer of 25, 10, 5, 1, etc.). The disclosure that the price can be rounded up infers that the price is rounded to the lowest multiple of the integer that is greater than the price. In other words, if the price is \$3.98 and the rounding code is one dollar, the price would be rounded up to \$4.00, not \$5.00 or \$6.00. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use a bar code scanner to input information about the items in Fiorini and to round the price up to the nearest multiple of the integer selected from the plurality of possible rounding integers. One would have been motivated to use a bar code scanner and to round the prices up to the nearest multiple of the integer in view of the wide spread use and availability of bar code scanners at points of sale and in view of the normal meaning of rounding up in the commerce arts.



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*Response to Arguments*

5. Applicant's arguments filed January 24, 2002 have been fully considered but they are not persuasive.

a. The Appellant argues in reference to the discussion in paragraph 3 of paper number 14 of the Double Patenting rejection of Claims 25 and 26 that the Examiner's interpretation that an "exchange" indicates that "one user receives the two items at substantially the same time as the other user receives the purchase price" must be read in light of the specification. The Examiner notes that as the Applicant pointed out "there is nothing in either the claims or the specification that require simultaneous receipt of the rounded purchase price and the items." There is also nothing in the specification that defines "exchange" as anything other than the normal and customary usage of the word as defined on page 450 of the Webster's II dictionary: "**exchange**: *vt* 1. To take or give in return for something else. 2. To give up (one thing) for another. 4. To provide in return for something of equal value: TRADE. *vi* 1. To trade for something of equal value. 2. To take part in a mutual trade, as of goods or services.". Therefore, the claimed feature in Claim 25 of "allowing the exchange of the at least one item and the first item for the rounded purchase price" would have been interpreted by one having ordinary skill in the art at the time the invention was made as the simultaneous trading of the items for the purchase price.

b. The Appellant argues against the 35 U.S.C. 101 rejection of Claims 1-24 in paragraph 5 of paper number 14 that the rounded purchase price is tangible, concrete, and useful. However, as the Examiner has previously noted, these claims do not disclose any use for the result of the

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rounding, nor do they tie the rounded price with any sort of tangible goods or service. Claim 1, for example, merely receives a rounding code from a plurality of rounding codes and then rounds a hypothetical number, called a purchase price by the Applicant, to determine a rounded number, which is not used in any way by the claim. In this claim, the purchase price is completely abstract and not associated with an item, goods, or service, but is merely the nomenclature the Applicant has given to the number being rounded by some rounding code received from somewhere. As the claim presents reads, a merchant mentally deciding to round a purchase price to any rounding code (i.e. \$1, \$5, \$10, or any level desired) would be infringing on the claim. Therefore, the above rejection of these claims stands.

c. The Applicant argues in reference to Claims 1-27 that “None of the references, nor the statements in the Examiner’s affidavit dated February 22, 2001, nor the subject matter of the Examiner’s Official Notice, alone or in combination, teach or suggest”...“receiving a rounding code”. The Examiner notes that in the portion of Eleftheriou cited by the Appellant, it is disclosed that the price is automatically adjusted (rounded) up or down to the nearest whole dollar, quarter, dime, or nickel amount, as desired. The Applicant states that in the reference the POS terminal is programmed to always adjust up or down to a particular value. However, the Examiner notes that the POS terminal may be programmed by entry of the desired rounding code by the merchant (or his programmer). Thus, the system is “receiving” the rounding code from a plurality of rounding codes from the merchant or programmer, as claimed by the Applicant. The Examiner notes that the claims do not recite how, when, or from where the rounding code is

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received. Therefore, the manually entry of the rounding code by the merchant in Eleftheriou equates to the claimed feature.

d. The Applicant argues in reference to Claim 28 that none of the references disclose “receiving a signal indicative of a scanned bar code on a first item not included in the at least one item” nor “selecting an integer from a plurality of integers based on the scanned bar code”. The Applicant also states that in Eleftheriou “the bar code scanner is used for entering, e.g. the cost of products, but not rounding codes”. The Examiner notes that in both the reference and the present application the bar code scanner is used to input the UPC of the items, not the price nor the rounding code. As discussed in the rejections of Claims 1-6 and 7-24 above and in the previous office actions, it would have been obvious to select a rounding code based on the price of one of the items (scanned bar code). It would be the merchant’s decision on whether to use the item with the largest or smallest rounding code or somewhere in between, and that the decision would be based on the logical outcome of such rounding. a merchant could choose to round up all purchase prices to the nearest five dollars. However, if the most expensive item in the purchase only cost three dollars, the customer may feel that the rounding was unfair, resulting in the probable loss of the customer’s future business. a merchant could also choose to round down all purchase prices to the nearest five dollars. However, if the most expensive item in the purchase only cost three dollars, the merchant would be giving away at least one of the items in the purchase, resulting in an undesirable loss of revenue. Therefore, it would be logical for the merchant to base the rounding code on only one item. In an extreme example of this, suppose a

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customer bought a new car with a purchase price of \$18,975.23 and a rounding code of \$500; a car alarm system with a purchase price of \$235.85 and a rounding code of \$10; and an air freshener with a purchase price of \$2.25 and a rounding code of \$1. Without any rounding taking place (and disregarding any sales tax, etc.) the total purchase price to the customer would be 19,213.33. There are three ways of calculating a rounded purchase price using the rounding codes from one of the items. First, the price of that item could be rounded down and added to the price of the other items (example a below); second, the total purchase price of the items could be rounded down to the rounding code of the item (example B below); or third, the total price of the other two items could be rounded up to the rounding code of the item (example C below).

Example a: If the merchant chose the rounding code of the air freshener (\$1), the rounded purchase price would be \$19,211.08 plus \$2 (\$2.25 rounded down to the nearest \$1) for a total of \$19,213.08 saving the customer 25 cents. If the merchant chose the rounding code of the alarm system (\$10), the rounded purchase price would be \$18,977.48 plus \$230 (\$235.85 rounded down to the nearest \$10) for a total of \$19,207.48 saving the customer \$5.85, effectively giving the customer the air freshener for free. Finally, if the merchant chose the rounding code of the car (\$100), the rounded purchase price would be \$238.10 plus \$18,500 (\$18,975.23 rounding down to the nearest \$500) for a total of \$18,738.10 saving the customer \$475.23, effectively giving the customer both the air freshener and the alarm system for free and also giving the customer a \$237.13 discount on the original purchase price of the car.

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Example B: If the merchant chose the rounding code of the air freshener (\$1), the rounded purchase price would be \$19,213 (\$19,213.33 rounded down to the nearest \$1) saving the customer 33 cents. If the merchant chose the rounding code of the alarm system (\$10), the rounded purchase price would be \$19,210 (\$19,213.33 rounded down to the nearest \$10) saving the customer \$3.33, effectively giving the customer the air freshener for free. Finally, if the merchant chose the rounding code of the car (\$500), the rounded purchase price would be \$19,000 (\$19,213.33 rounded down to the nearest \$500), saving the customer \$213.33, effectively giving the customer the air freshener for free and a \$211.08 discount on the alarm system.

Example C: If the merchant chose the rounding code of the air freshener (\$1), the rounded purchase price would be \$19,212 (\$19,211.08 rounded up to the nearest \$1) saving the customer \$1.33. If the merchant chose the rounding code from the alarm system (\$10), the rounded purchase price would be \$18,980 (\$18,977.48 rounded up to the nearest \$10) saving the customer \$33.33, effectively giving the customer the air freshener for free and a \$31.08 discount on the alarm system. Finally, if the merchant chose the rounding code of the car (\$500), the rounded purchase price would be \$500 (\$238.10 rounded up to the nearest \$500) saving the customer \$18,713.33, effectively giving the car away for only \$211.90!

These examples clearly show that the choice of the item and its corresponding rounding code drastically affects the rounded purchase price and results in a wide variance of "benefits". Depending upon the rounding method used, the benefit to the customer (and loss to the merchant)

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could range from a mere 25 cent savings when the rounding code for the air freshener is chosen in Example a to a \$18,713.33 savings when the rounding code of the car is chosen in Example C. Therefore, the merchant in Eleftheriou would select the rounding code based on the item being read by the bar code scanner.

The Examiner also notes that claims recite “receiving a signal indicative of a scanned bar code on a first item not included in the at least one item”. This is interpreted as scanning in one or more bar codes to identify one or more corresponding items as the “at least one item”, determining the price for each of the one or more items, and then scanning in the bar code of another item as the “first item”. The merchant then determines a rounding code based on the first item, rounds the purchase price, and requires the customer to pay the rounded price. Since there is nothing in the claims reciting that the first item is “offered” as a supplemental product to the customer by the merchant (as in the Applicant’s co-pending application), it must be assumed that the customer has selected the first item for purchase and presented it at the POS terminal along with the other items. Thus, the merchant is selecting one of the items presented by the customer to determine the rounding code to use, as Eleftheriou discloses. Whether the item from which the rounding code is determined is entered (scanned) first, second, third, or last during the transaction would depend entirely on how the customer placed the items on the POS terminal’s conveyor belt and not affect the decision process of the claimed invention nor Eleftheriou’s.

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e. The Applicant again argues in reference to Claim 29 that the references do not disclose “receiving a first item from a customer, in which the first item is not included in the at least one item”. This argument has been discussed in the preceding paragraph (5d).

f. The Applicant once again argues in reference to Claim 30 that the references do not disclose “receiving a first item from a customer, in which the first item is not included in the at least one item”. This argument has been discussed in paragraph 5d above.

g. The Applicant argues in reference to newly added Claim 31 that the references do not disclose “determining the price of a subset of the plurality of items, the subset not including the item corresponding to the one of the scanned bar codes”. This argument has been discussed in paragraph 5d above.

### ***Conclusion***

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

a shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Exr. James W. Myhre whose telephone number is (703) 308-7843. The examiner can normally be reached on weekdays from 6:30 a.m. to 3:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eric Stamber, can be reached on (703) 305-8469. The fax phone number for Formal of Official faxes to Technology Center 2100 is (703) 746-7239 or 7238. Draft or Informal faxes for this Art Unit can be submitted to (703) 746-7240. Draft faxes may also be submitted directly to the examiner at (703) 746-5544.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group Receptionist whose telephone number is (703) 308-3900.

  
JWM

April 3, 2002

  
ERIC W. STAMBER  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100